

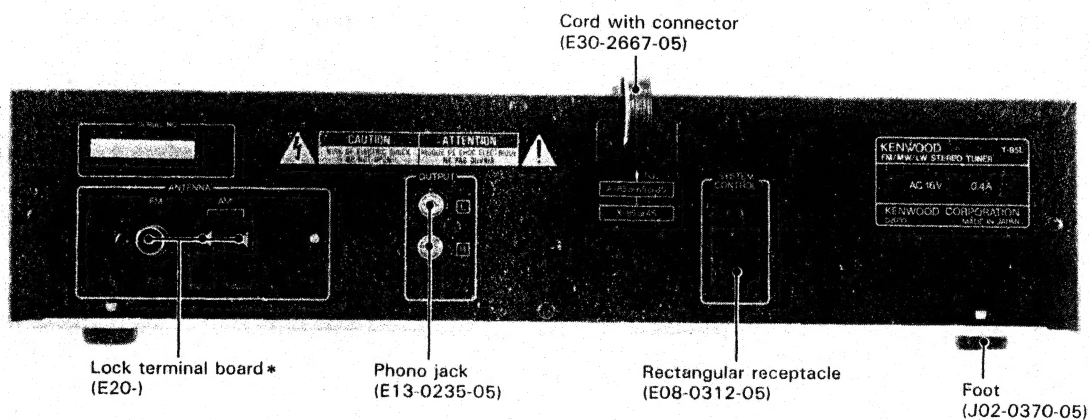
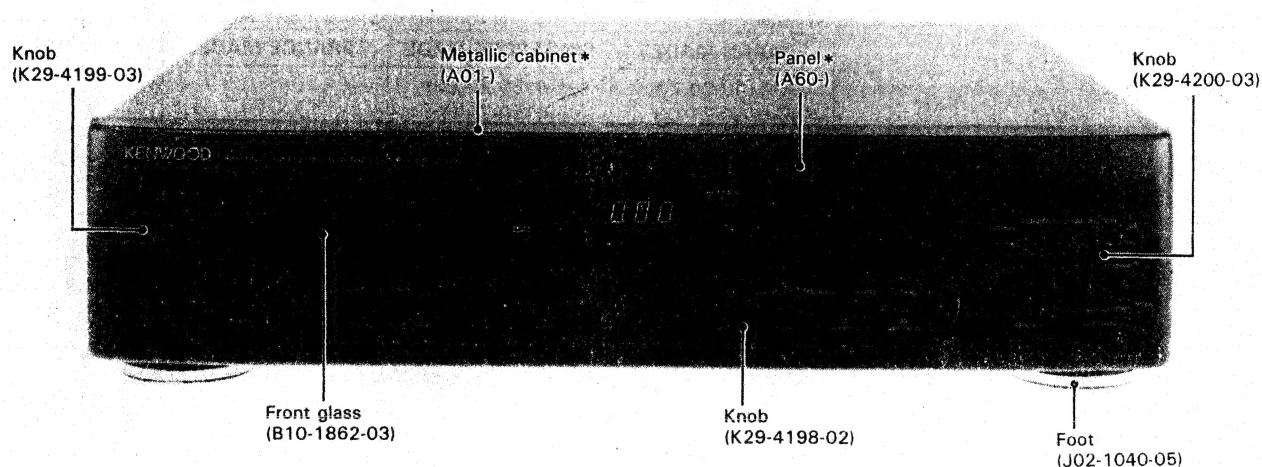
FM/MW/LW STEREO SYNTHESIZER TUNER

T-85/85L

SERVICE MANUAL

KENWOOD

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B51-4346-00(T)1816



T-85 and T-85L don't have a power supply transformer. Use A-45/65/85/ or RM-90PS power supply to supply power. If neither is available, adjust to operate as instructed on page 8.

When turning the power on, short the connector pin of CN201 (X05-B/2).

* Refer to Parts List on page 25.
Photo is T-85L.

T-85/85L



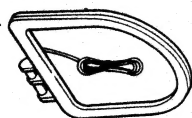


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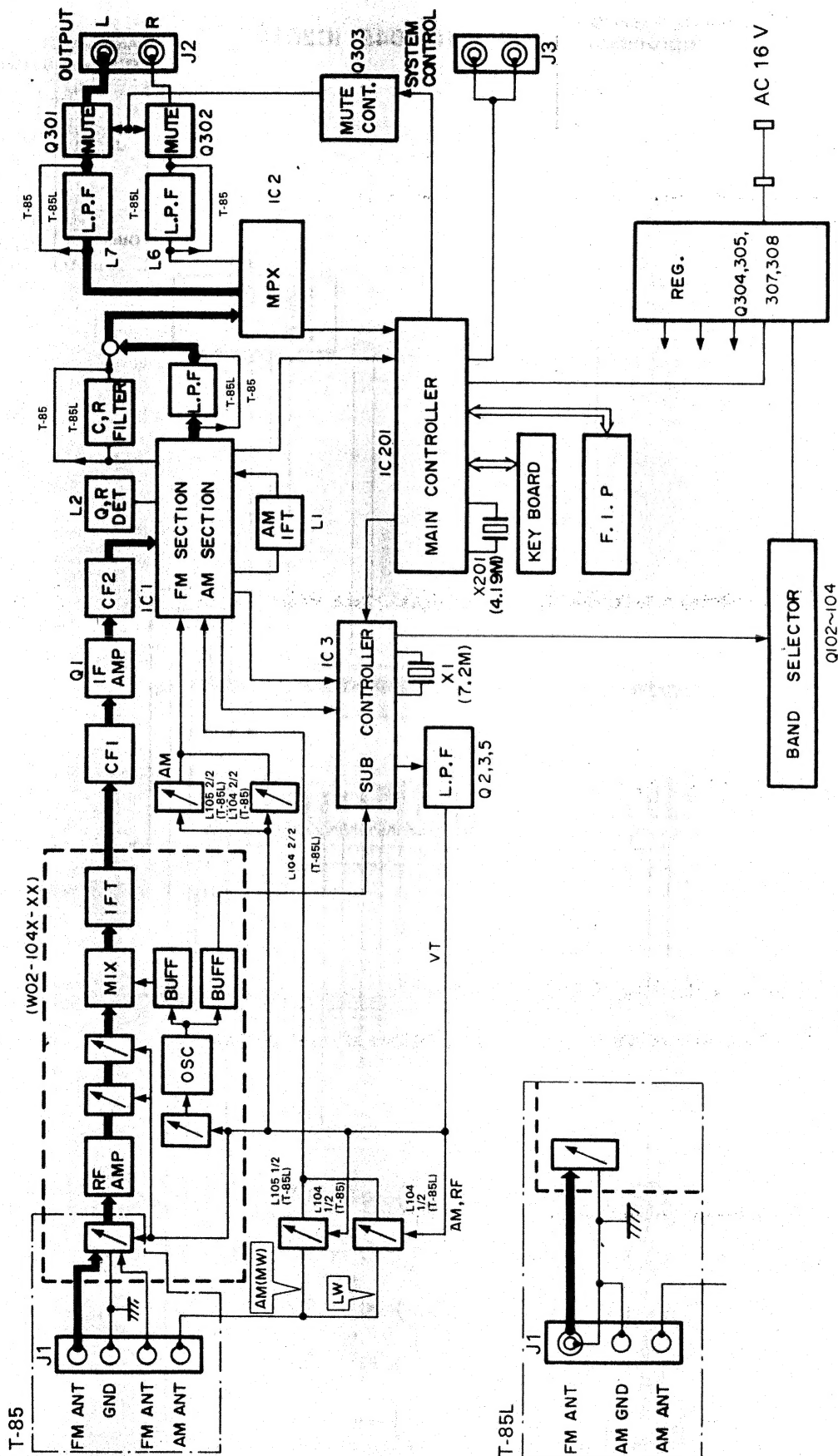
	JAPAN MADE	SINGAPORE MADE	FRANCE MADE
T-85	X05-4140-20 (M) X05-4140-71 (X)	X05-4150-20 (M) X05-4150-71 (X)	_____
T-85L	X05-4142-71 (T,E)	X05-4152-71 (T,E)	X05-4142-72 (E)

The T-85 and T-85L are made in different countries. However, their circuits are identical.

Accessories

<p>LOOP ANTENNA (T90-0153-05): FRANCE MADE</p> 	<p>T TYPE ANTENNA (T90-0176-05): JAPAN MADE (T90-0176-05): FRANCE MADE (T90-0175-05): SINGAPORE MADE</p> 
<p>LOOP ANTENNA (T90-0173-05): JAPAN MADE (T90-0174-05): SINGAPORE MADE</p> 	<p>ANTENNA ADAPTOR (T90-0177-05): (T-85L ONLY)</p>  <p>ANTENNA HOLDER (J19-2815-04)</p> 

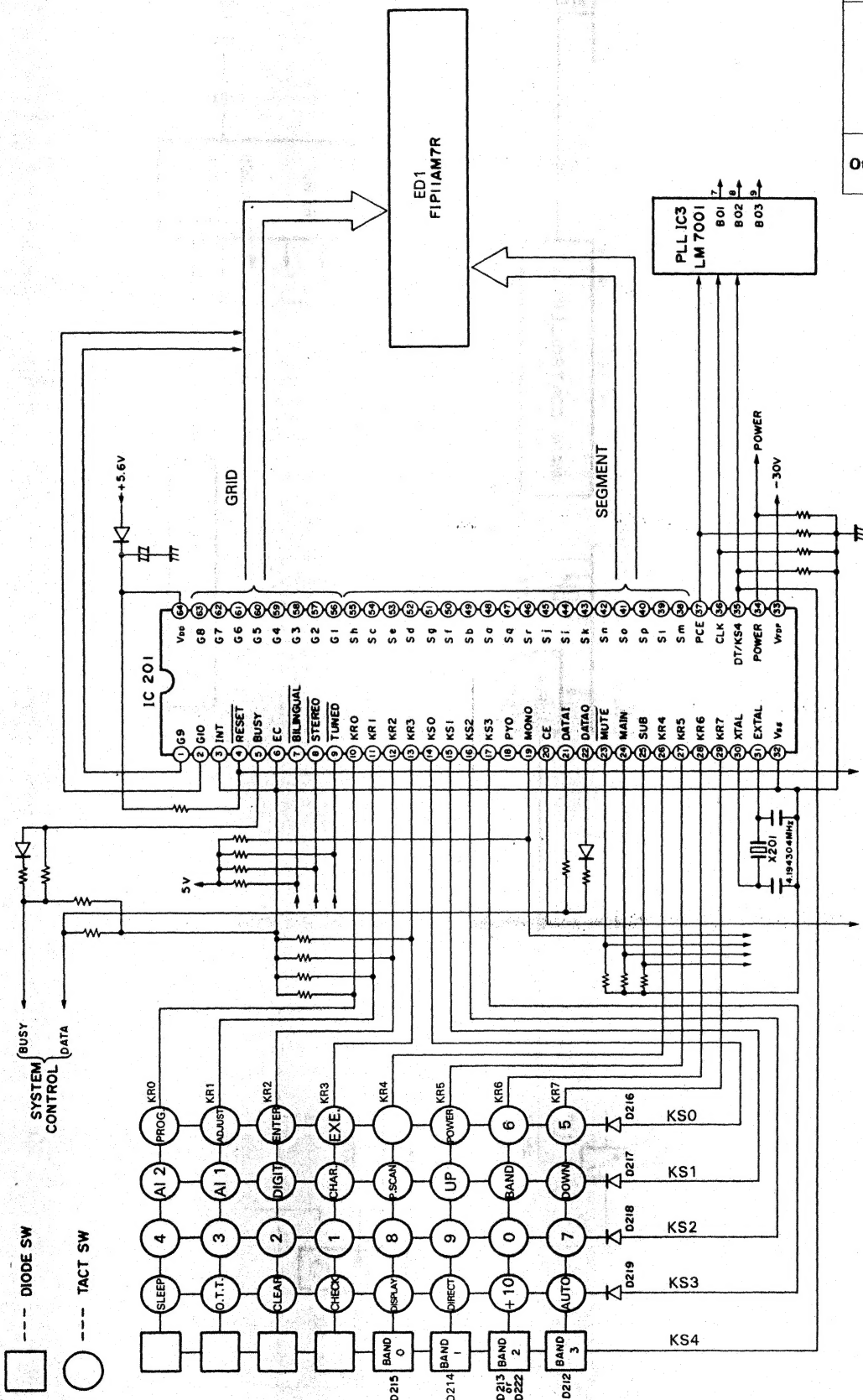
BLOCK DIAGRAM



T-85/85L

CIRCUIT DESCRIPTION

Blockdiagram of surrounding microprocessor (CXP50216-104S: IC201)



BAND SELECT				
DESTINATION	BAND	B01	B02	B03
J	FM	L	H	L
	AM	L	L	H
	VHF L	H	H	L
	VHF H	H	H	H
	UHF	H	L	L
Other	FM	H	H	L
	AM	H	L	H
	LW	L	H	H

CIRCUIT DESCRIPTION

Pin functions

Pin No.	Pin name	I/O	Name	Operation description
1, 2	T1, T0	O	G9, G10	FL grid output 9G, 10G
3	INT	I		No use (GND)
4	RST	I	RESET	Reset input H: NORMAL L: RESET
5	ADI/PB3	I/O	BUSY	System control BUSY input/output
6	EC	I		No use (GND)
7	SC/PX0	I	BIL	BILINGUAL H: NORMAL L: BILINGUAL
8	SO/PX1	I	STEREO	Stereo signal input H: MONO L: STEREO
9	SI/PX2	I	TUNED	Tuning signal input H: NO L: TUNED
10~13	PF0~PF3	I	KR0~KR3	Key return input H: ON L: OFF
14~17	PE0~PE3	O	KS0~KS3	Key scan output H: ON L: OFF
18	PY0	O		No use (OPEN)
19	PWM/PY1	O	MONO	Forced MONO output H: MONO L: STEREO
20	WP/PY2	I	CE	AC OFF detection input H: AC ON L: AC OFF
21	RMC/PY3	I	DATAI	System control DATA input
22	PD0	O	DATAO	System control DATA output
23	PD1	O	MUTE	Line mute H: MUTE OFF L: MUTE ON
24	PD2	O	MAIN	No use
25	PD3	O	SUB	No use
26~29	PC0~PC3	I	KR4~KR7	Key return input H: ON L: OFF
30	XTAL			Quartz oscillator 4.194304MHz
31	EXTAL			Quartz oscillator 4.194304MHz
32	V _{SS}			GND pin
33	V _{FDP}			-30 V
34	PH0/S0	O	POWER	POWER ON/OFF control H: ON L: OFF
35	PH1/S1	O	DT/KS4	PLL DATA output Key scan output for destination SW
36	PH2/S2	O	CLK	PLL CLOCK output
37	PH3/S3	O	PCE	PLL CE output
38~55	PG0/S4~S23/T8	O	Sm~Sh	FL segment output (m, l, p, o, n, k, i, j, r, q, a, b, f, g, d, e, c, h)
56~63	S22/T9~T2	O	G1~G8	FL grid output 1G~8G
64	V _{DD}			+5 V (Power supply)

T-85/85L

CIRCUIT DESCRIPTION

Test mode

- (1) Method of setting
While pressing the DOWN key, turn AC ON.
- (2) Contents
Power ON
FLL all lit
Test frequency setting (Table 1)
- (3) Method of canceling
Clearing the FL all lit state is performed by numeral key, BAND key, UP/DOWN key or POWER key.

Initial status setting (reset)

- (1) Method
While pressing the ENTER key, turn AC ON.
- (2) Contents
The all memory is cleared and the initial status is fully restored. At this time, however, test frequency is newly memorized in the preset memory. (Table 1)

Destination Preset channel	T-85				T-85L	
	J TYPE		M, X TYPE		T, E TYPE	
01ch	FM	83.5 MHz	FM	98.0 MHz	FM	98.0 MHz
02ch	FM	90.0 MHz	FM	108.0 MHz	FM	108.0 MHz
03ch	AM	630 kHz	AM	630 kHz	AM	630 kHz
04ch	AM	990 kHz	AM	990 kHz	AM	990 kHz
05ch	AM	1440 kHz	AM	1440 kHz	AM	1440 kHz
06ch	AM	1602 kHz	AM (AM 1610 kHz)	1602 kHz	AM	1602 kHz
07ch	TV	3 ch	FM	87.5 MHz	LW	162 kHz
08ch	TV	8 ch	FM	87.5 MHz	LW	216 kHz
09ch	TV	35 ch	FM	87.5 MHz	LW	270 kHz
10ch	FM	89.1 MHz	FM	89.1 MHz	FM	89.1 MHz
11ch	TV	1 ch	FM	87.5 MHz	LW	281 kHz
12ch	TV	3 ch	FM	87.5 MHz	FM	87.5 MHz
13ch	TV	4 ch	FM	87.5 MHz	FM	87.5 MHz
14ch	TV	8 ch	FM	87.5 MHz	FM	87.5 MHz
15ch	TV	12 ch	FM	87.5 MHz	FM	87.5 MHz
16ch	TV	13 ch	FM	87.5 MHz	FM	87.5 MHz
17ch	TV	35 ch	FM	87.5 MHz	FM	87.5 MHz
18ch	TV	62 ch	FM	87.5 MHz	FM	87.5 MHz
19ch	FM	76.0 MHz	FM	87.5 MHz	FM	87.5 MHz
20ch ~ 30ch	FM	76.0 MHz	FM	87.5 MHz	FM	87.5 MHz

(Table 1)

Conditions by destination

Destination type		Destination switches				Band	Receiving frequency range	Inter-channel space	Intermediate frequency	PLL reference frequency
		B3	B2	B1	B0					
T-85	J	0	0	0	0	FM	76.0 ~ 90.0 MHz	100 kHz	− 10.75 MHz	25 kHz
						AM	531 ~ 1602 kHz	9 kHz	+ 450 kHz	9 kHz
						TV	1 ~ 62ch	6 MHz	− 10.75 MHz	25 kHz
	M	1	1 or 0	1	0	FM	87.5 ~ 108.0 MHz	100 kHz /50 kHz	+ 10.7 MHz	50 kHz
						AM	531 ~ 1602 kHz or 530 ~ 1610 kHz	9 kHz or 10 kHz	+ 450 kHz	10 kHz
	K,P	1	0	0	0	FM	87.5 ~ 108.0 MHz	100 kHz	+ 10.7 MHz	50 kHz
						AM	530 ~ 1700 kHz	10 kHz	+ 450 kHz	10 kHz
	X	1	1	0	0	FM	87.5 ~ 108.0 MHz	50 kHz	+ 10.7 MHz	50 kHz
						AM	531 ~ 1602 kHz	9 kHz	+ 450 kHz	9 kHz
T-85L	T,E	1	1	0	1	FM	87.5 ~ 108.0 MHz	50 kHz	+ 10.7 MHz	50 kHz
						MW	531 ~ 1602 kHz	9 kHz	+ 450 kHz	9 kHz
						LW	153 ~ 281 kHz	1 kHz	+ 450 kHz	1 kHz

T-85/85L

ADJUSTMENT

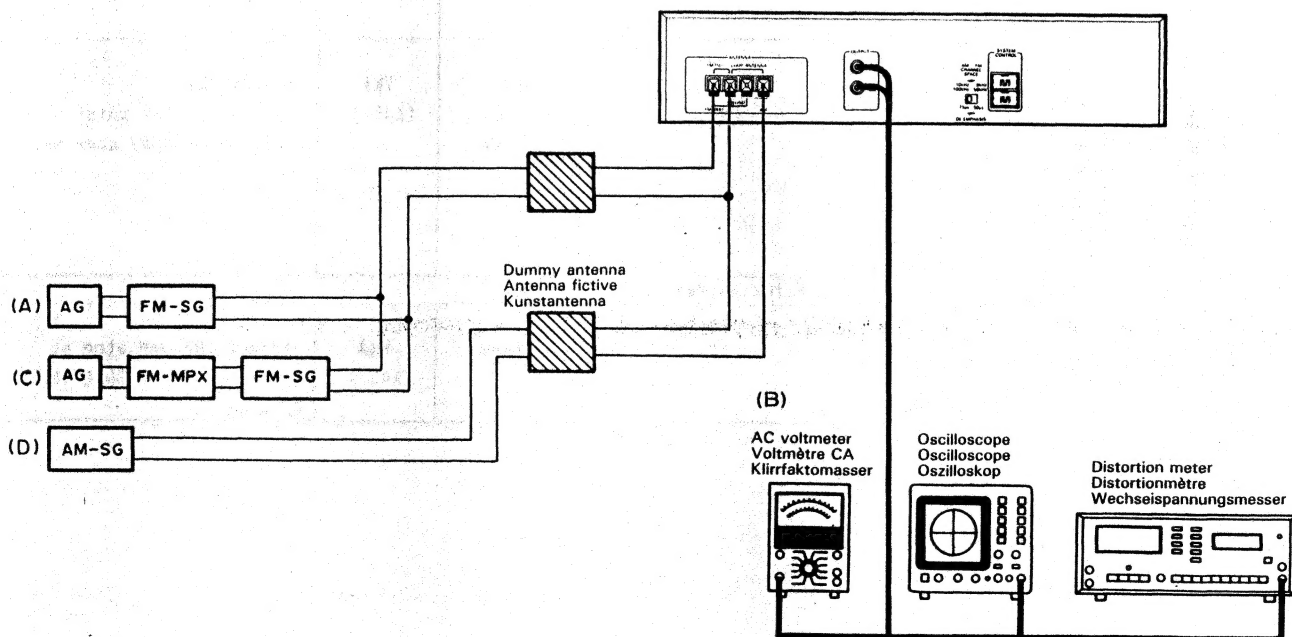
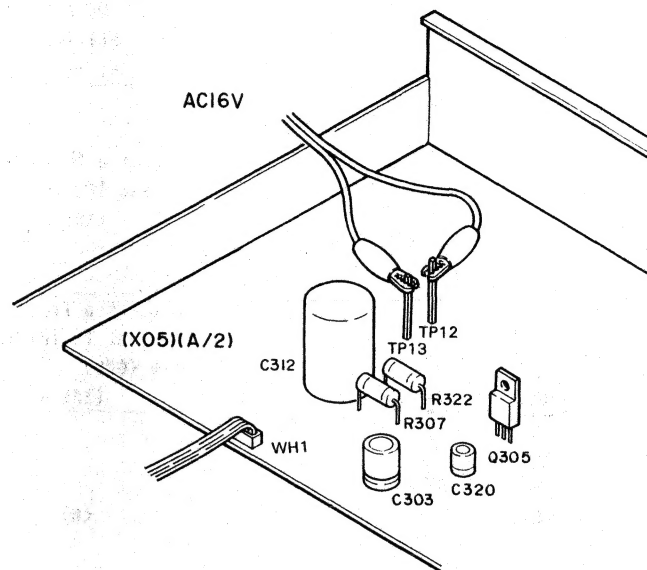
No.	ITEM	INPUT SETTINGS	OUTPUT SETTINGS	TUNER SETTINGS	ALIGNMENT POINTS	ALIGN FOR	FIG.
FM SECTION		SELECTOR: FM					
1	DISCRIMINATOR	(A) 98.0MHz 1kHz, ± 75 kHz dev (M, X type) 1kHz, ± 40 kHz dev (E, T type) 60dB μ (ANT input)	Connect a DC voltmeter between TP3 and TP4. (X05-)	AUTO or MONO 98.0MHz	L2 (X05-)	0V	(a)
2	VCO	(A) 98.0MHz 0 dev 60dB μ (ANT input)	Connect a frequency counter to TP5 and TP6 (GND). (X05-)	AUTO 98.0MHz	VR2 (X05-)	19.00kHz	(b)
3	DISTORTION (STEREO)	(C) 98.0MHz 1kHz, ± 68.25 kHz dev Pilot: ± 7.5 kHz dev (M, X type) 1kHz, ± 40 kHz dev Pilot: ± 6 kHz dev (E, T type) 60dB μ (ANT input)	(B)	MONO 98.0MHz	IFT (W02-)	Minimum distortion	
4	SEPARATION (E, T type only)	(C) 98.0MHz 1kHz, ± 40 kHz dev Pilot ± 6 kHz dev Selector: L or R 60dB μ (ANT input)	(B)	AUTO 98.0MHz	VR4 (X05-)	Minimum crosstalk	
5	TUNING LEVEL	(A) 98.0MHz 1kHz, ± 75 kHz dev (M, X type) 1kHz, ± 45 kHz dev (E, T type) 14dB μ (ANT input) 750 18dB μ (ANT input) 3000	(B)	AUTO or MONO 98.0MHz	VR1 (X05-)	Adjust VR1 and stop at the point where ED1(TUNED) goes on.	
AM (MW) SECTION		SELECTOR: AM(MW)					
(1)	TUNING LEVEL	(D) 1008kHz 400Hz, 30% mod 26dB μ (ANT input)	(B)	1008kHz	VR3 (X05-)	Adjust VR3 and stop at the point where ED1(TUNED) goes on.	

T-85/85L

ADJUSTMENT

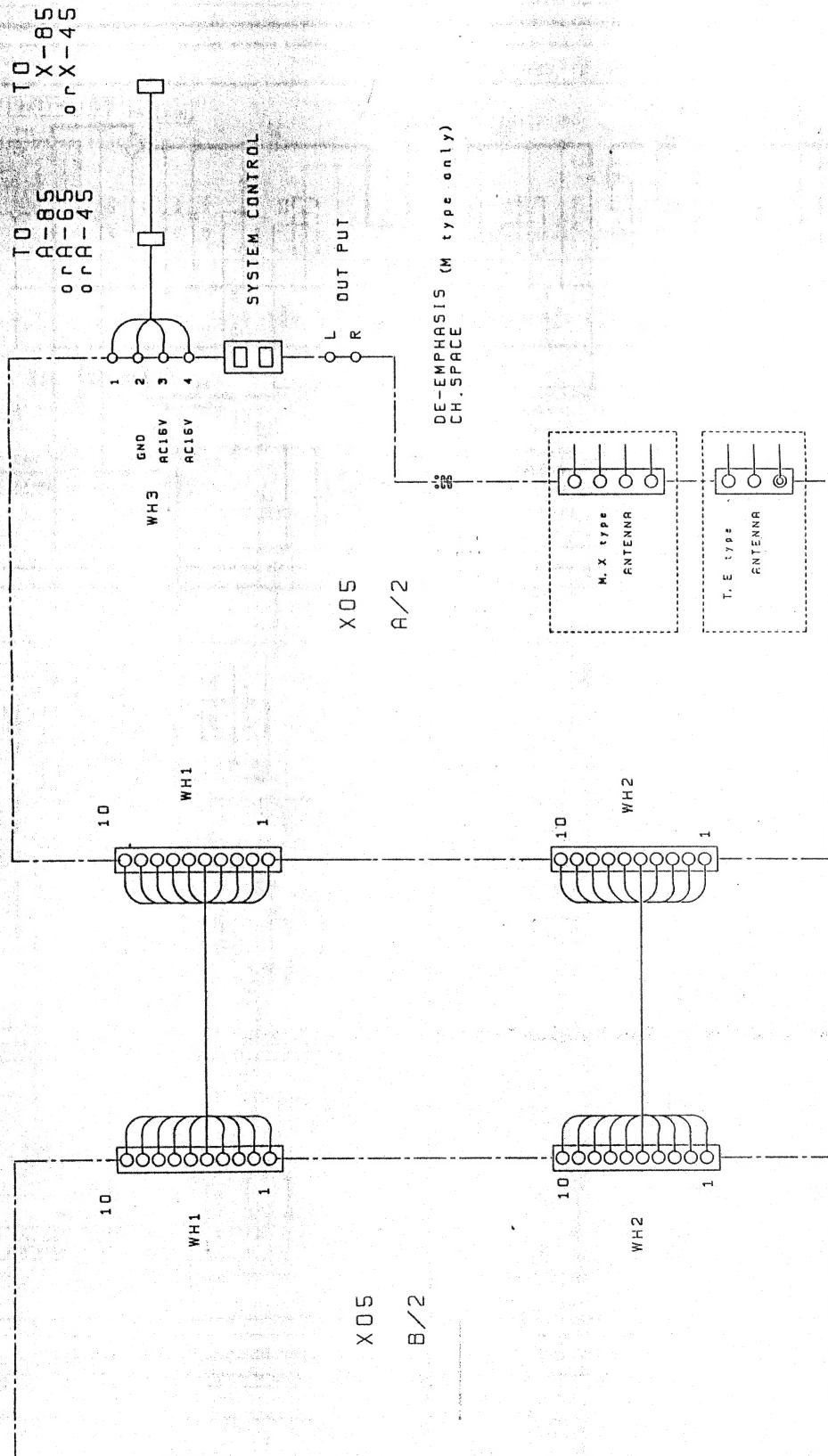
The T-85 and T-85L don't have a power transformer. Use A-45/65/85 or RM-90PS to supply power to the T-85/85L. If neither is available, apply AC 16 V to TP12 and TP13 of the tuner unit (X05, A/2).

When turning the power on, short the connector pin of CN 201 (X05-B/2).



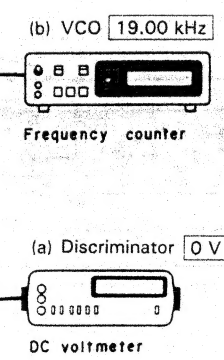
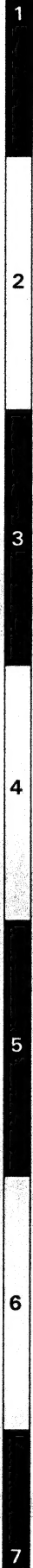
T-85/85L

WIRING DIAGRAM

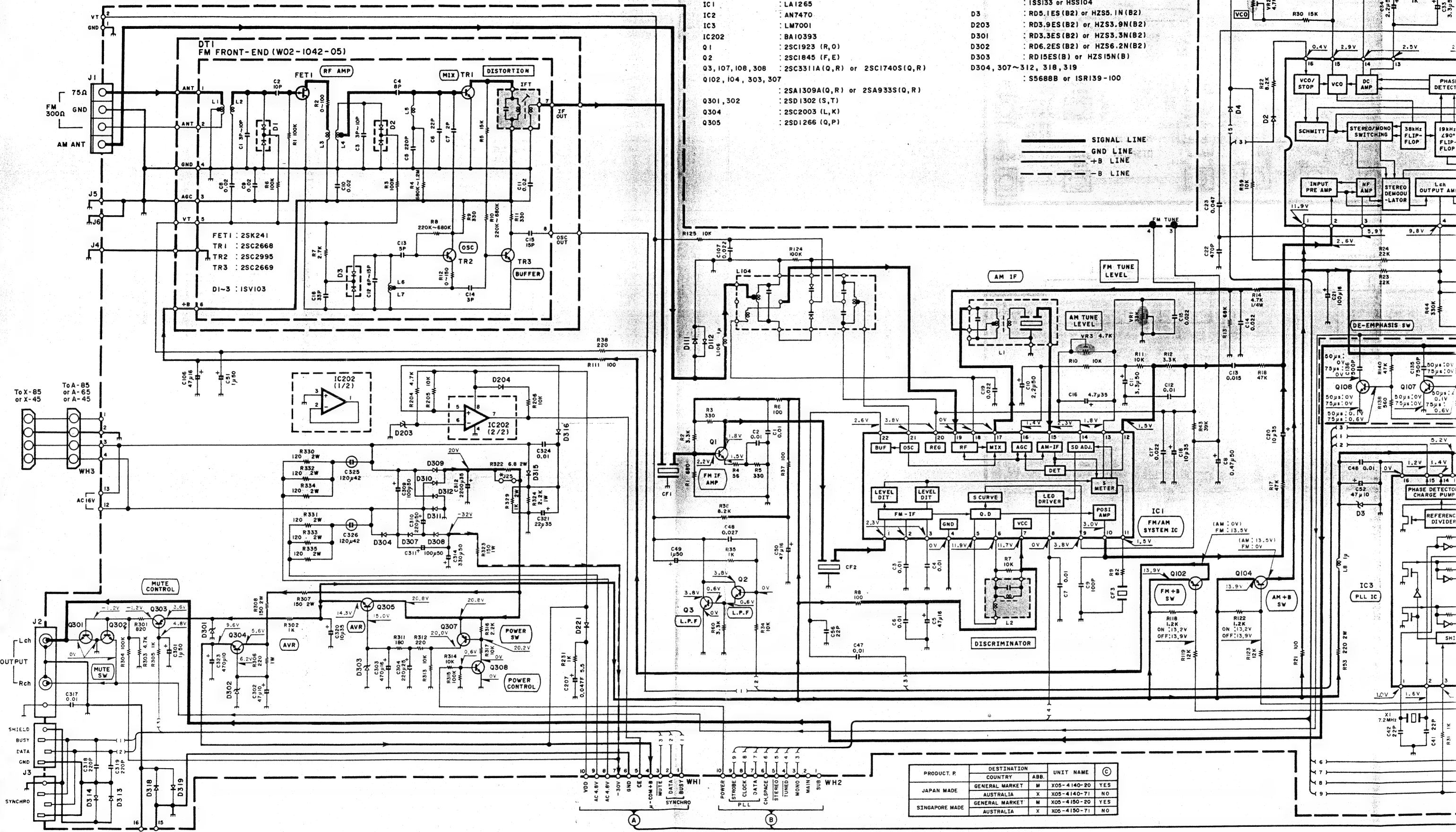


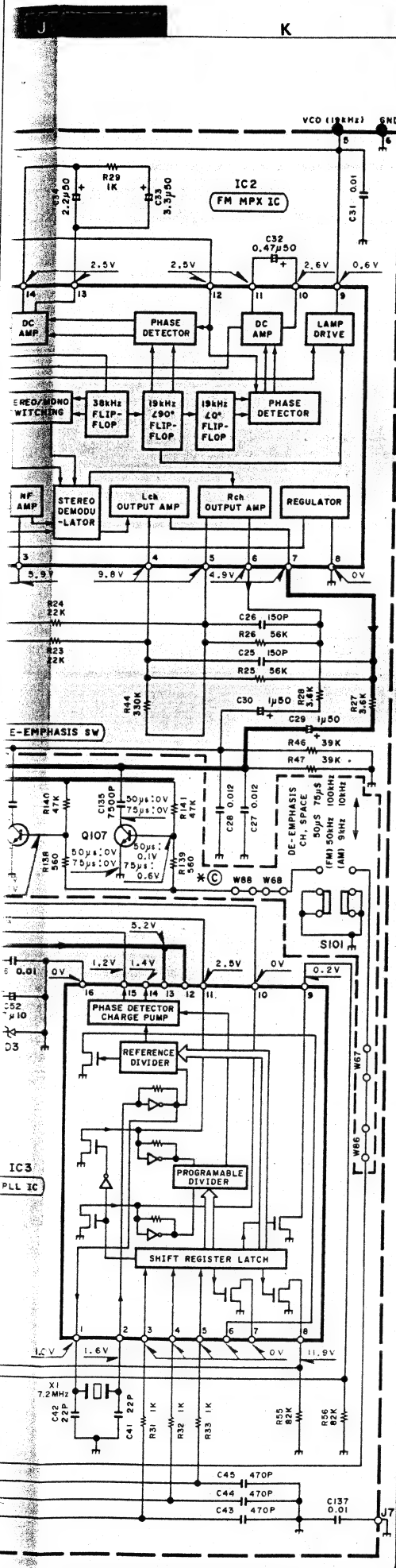
A **B** **C** **D** **E** **F** **G** **H**

Pre-experimental phase Experimental phase



TUNER UNIT
(X05-4140-XX) (A/2) JAPAN MADE
(X05-4150-XX) (A/2) SINGAPORE MADE






T-85 (M)(1/2)

DC voltages are as measured with a high impedance voltmeter. Values may vary slightly due to variations between individual instruments or/and units.

Les tensions c.c. doivent être mesurées avec un voltmètre à haute impédance. Les valeurs peuvent différer légèrement du fait des variations inhérentes aux appareils et aux instruments de mesure individuels.

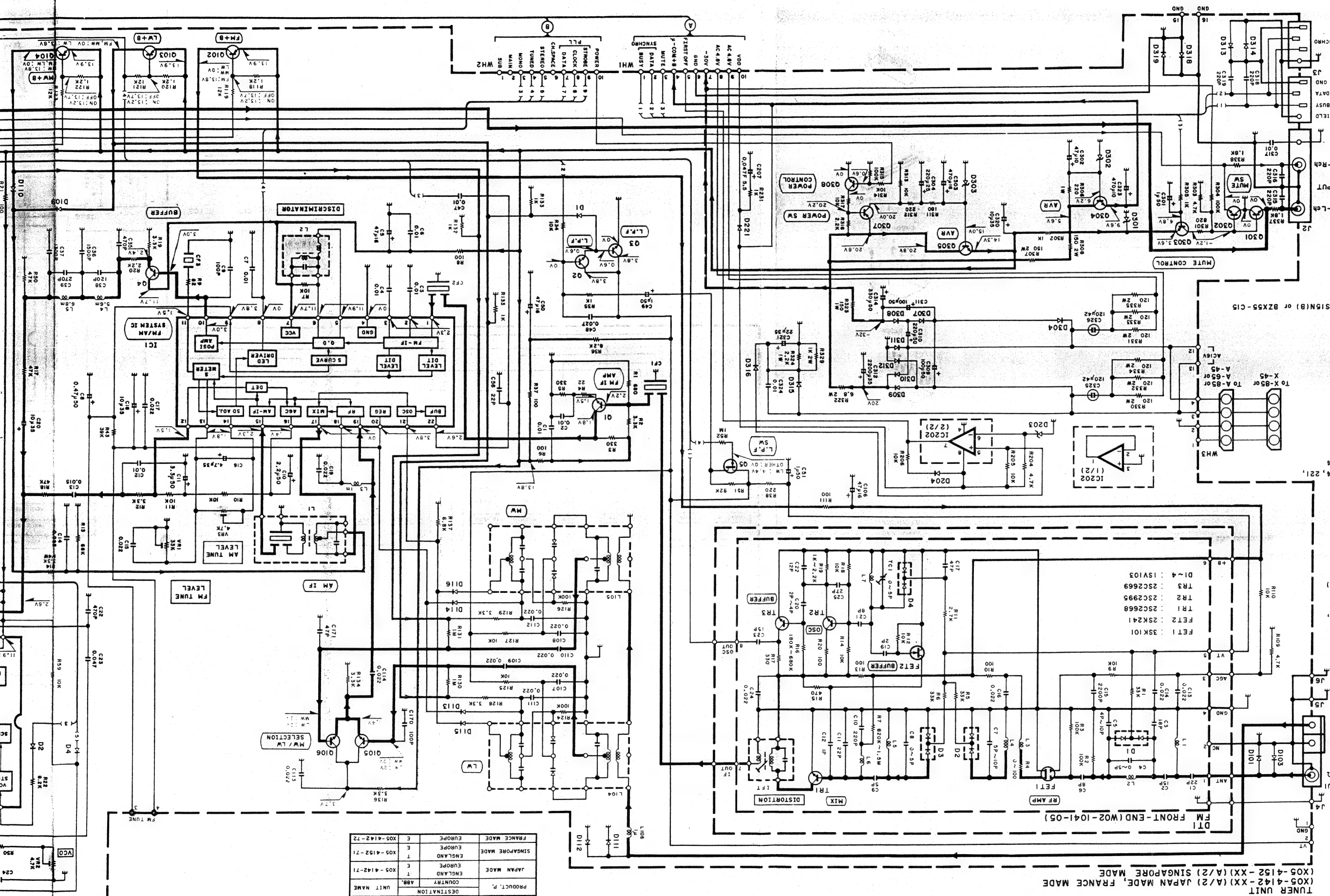
Die angegebenen Gleichspannungswerte wurden mit einem hochohmigen Spannungsmesser gemessen. Dabei schwanken die Meßwerte aufgrund von Unterschieden zwischen einzelnen Instrumenten oder Geräten u.U. geringfügig.

CAUTION: For continued safety, replace safety critical components only with manufacturer's recommended parts (refer to parts list).  Indicates safety critical components. To reduce the risk of electric shock, leakage-current or resistance measurements shall be carried out (exposed parts are acceptably insulated from the supply circuit) before the appliance is returned to the customer.

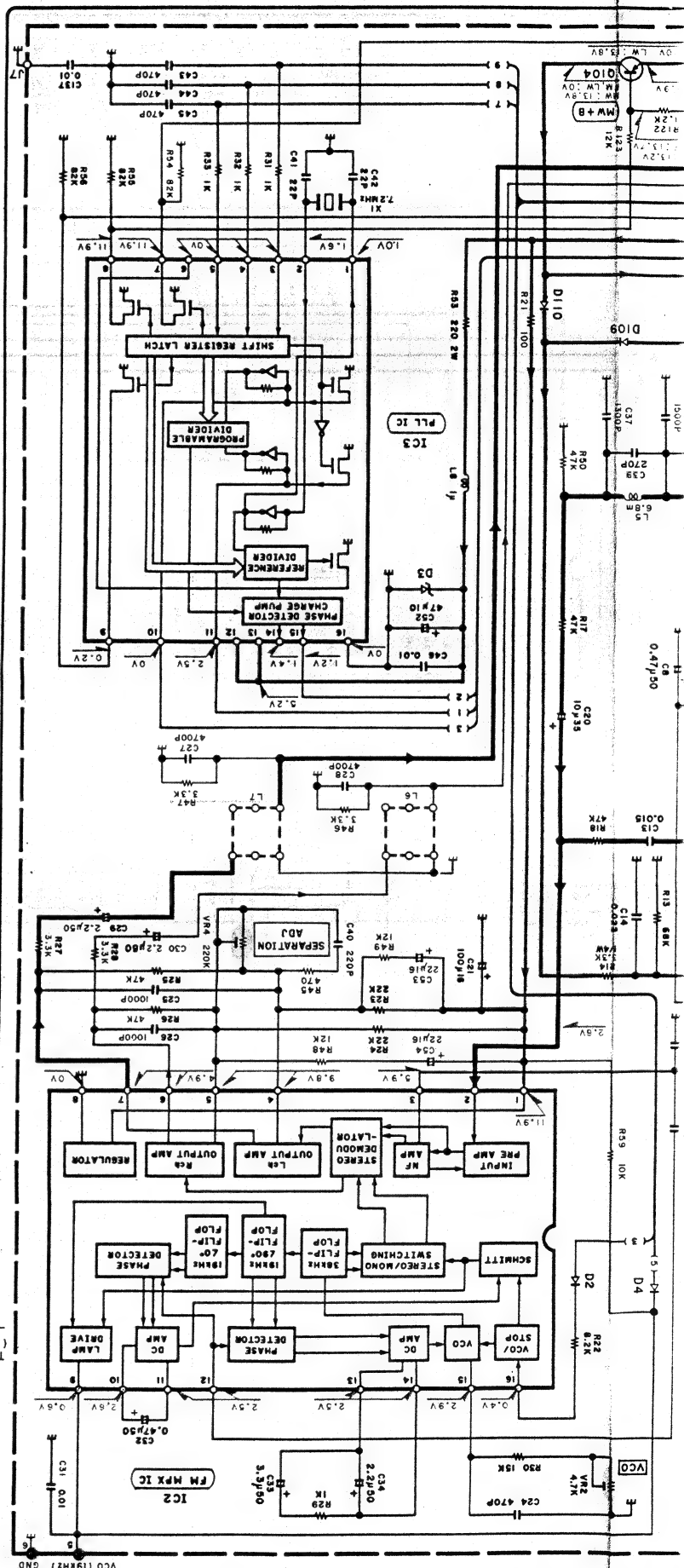
SIGNAL LINE
GND LINE
+B LINE
-B LINE

- IC1 : LA1265
- IC2 : AN7470
- IC3 : LM7001
- IC202 : BA10393
- O1 : 2SC1923(R,O)
- O2 : 2SC1845(F,E)
- O3,4,105,106,308 : 2SC3311(A,Q,R)
- 2SC17405(Q,R)
- JC501(P,O)
- 2SK364(G,R,BL)
- 2SK163(L,M)
- 0102~104,303,307 : 2SA1309A(Q,R)
- 2SA9335(Q,R)
- J4101(P,O)
- 0301,302 : 2SD1302(S,T)
- 0304 : 2SC2003(L,K)
- 0305 : 2SD1266(Q,P)
- D1,2,4,101,103,109~116,204,221,313~316 : IS1133, HSS104 or IN4148
- D3 : RD5,1ES1B2, HZS5,1N1B2 or BZX55-C5V1
- D203 : RD3,9ES1B2, HZS3,9N1B2 or BZX55-C3V9
- D301 : RD3,3ES1B2, HZS3,3N1B2 or BZX55-C3V3
- D302 : RD6,2ES1B2, HZS6,2N1B2 or BZX55-C6V2
- D303 : RD15E1B1, HZS15N1B1 or BZX55-C15
- D304,307~312,318,319 : 55688B, IN4004 or ISR139-100

TUNER UNIT
(X05-4142-XX) (A/2) JAPAN MADE, FRANCE MADE
(X05-4152-XX) (A/2) SINGAPORE MADE




UNIT NAME	ABB.	COUNTRY	DESTINATION
FRANCE MADE			EUROPE
SINGAPORE MADE			EUROPE
ENGLAND			EUROPE
JAPAN MADE			EUROPE
ENGLAND			EUROPE
X05-4142-71			
X05-4152-71			
X05-4142-72			



05-X05-(B/2) WH1
A
B
To
(X05-)
(B/2)
-WH2

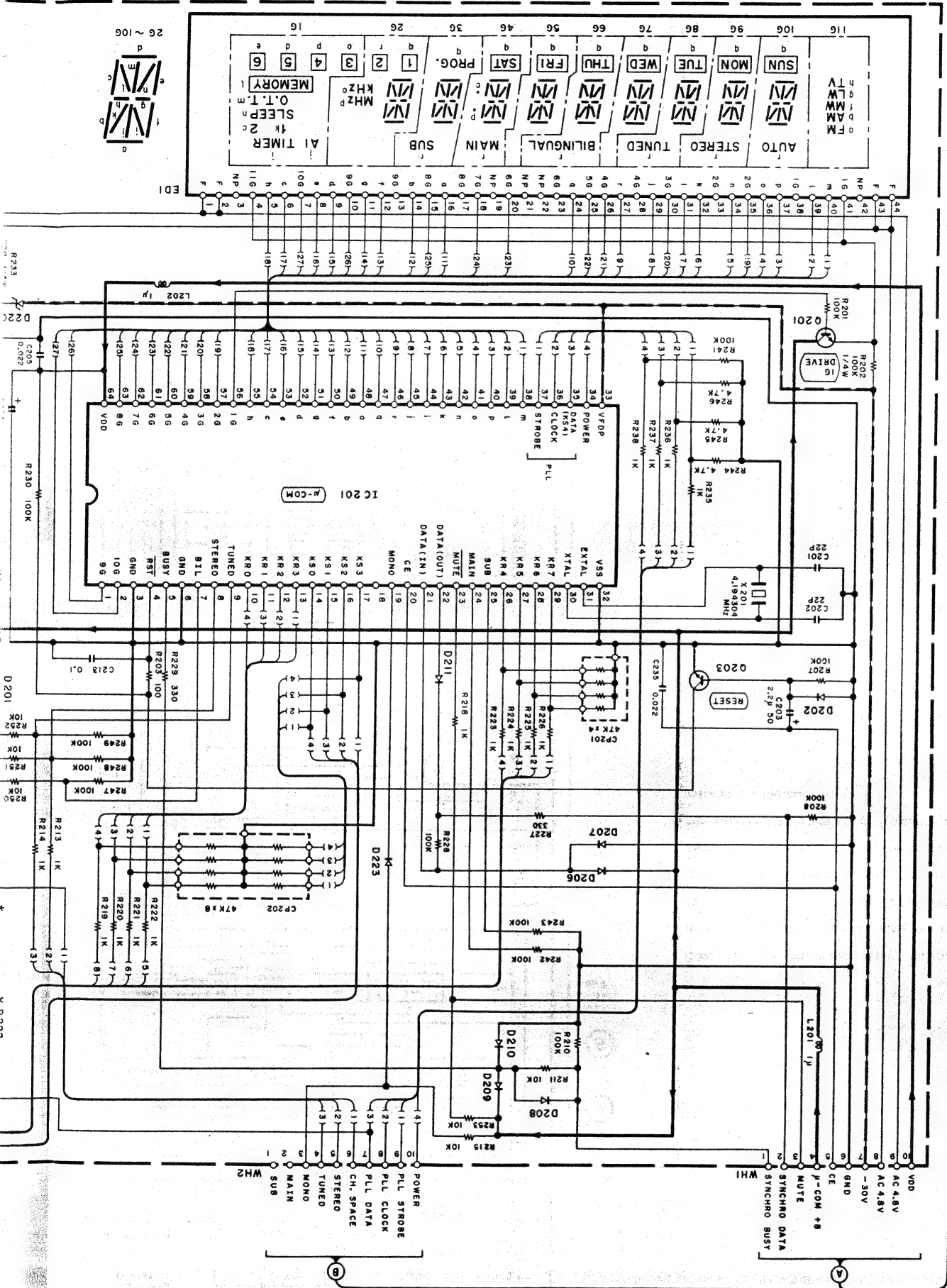
returned to the customer.

CAUTION: For continued components only with manifold to parts list).  Indicate the risk of electric measurements shall be carefully insulated from the sun

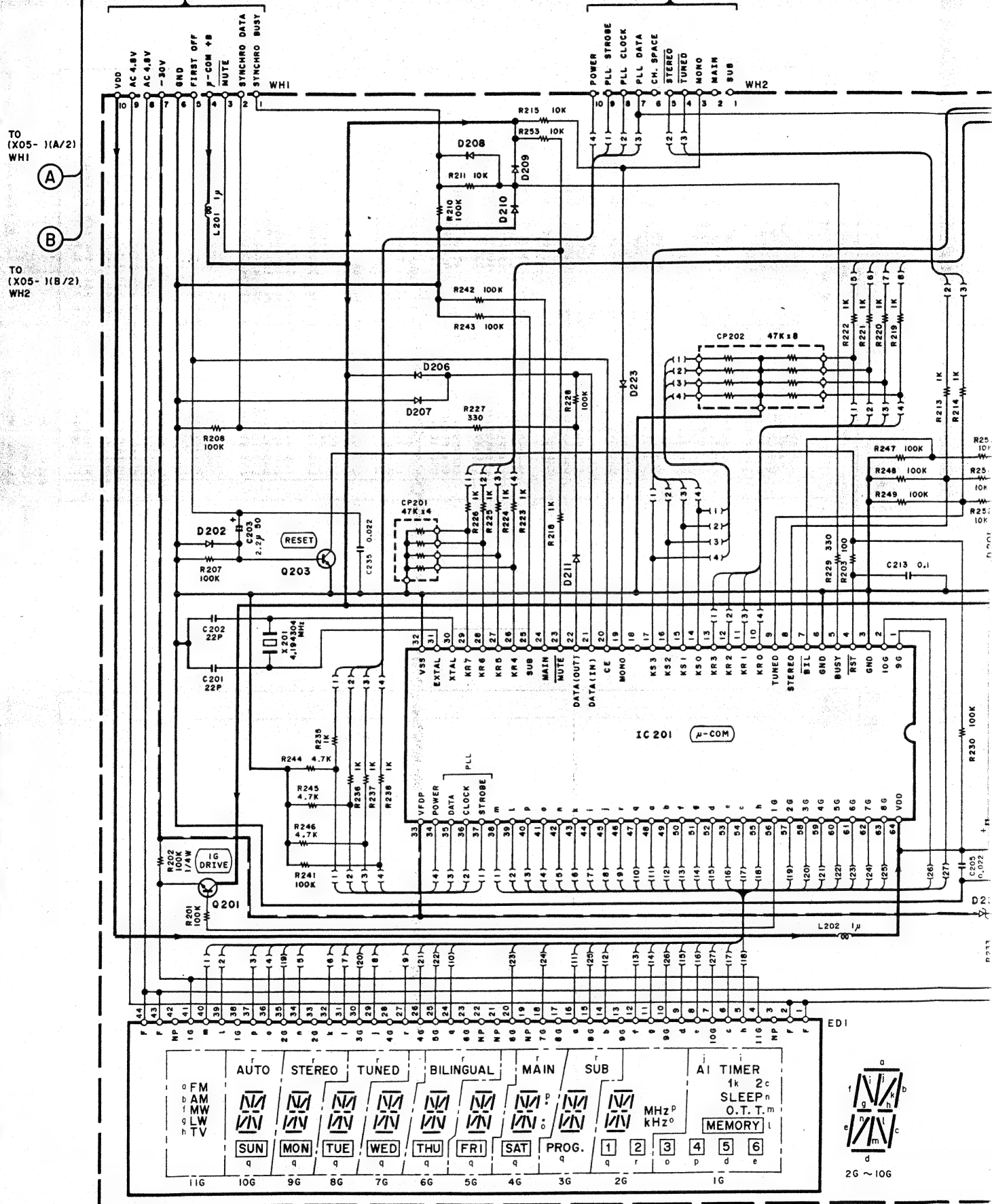
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DC voltages are as
voltage meter. Values
between individual in
Les tensions c.c. d
mètre à haute imp
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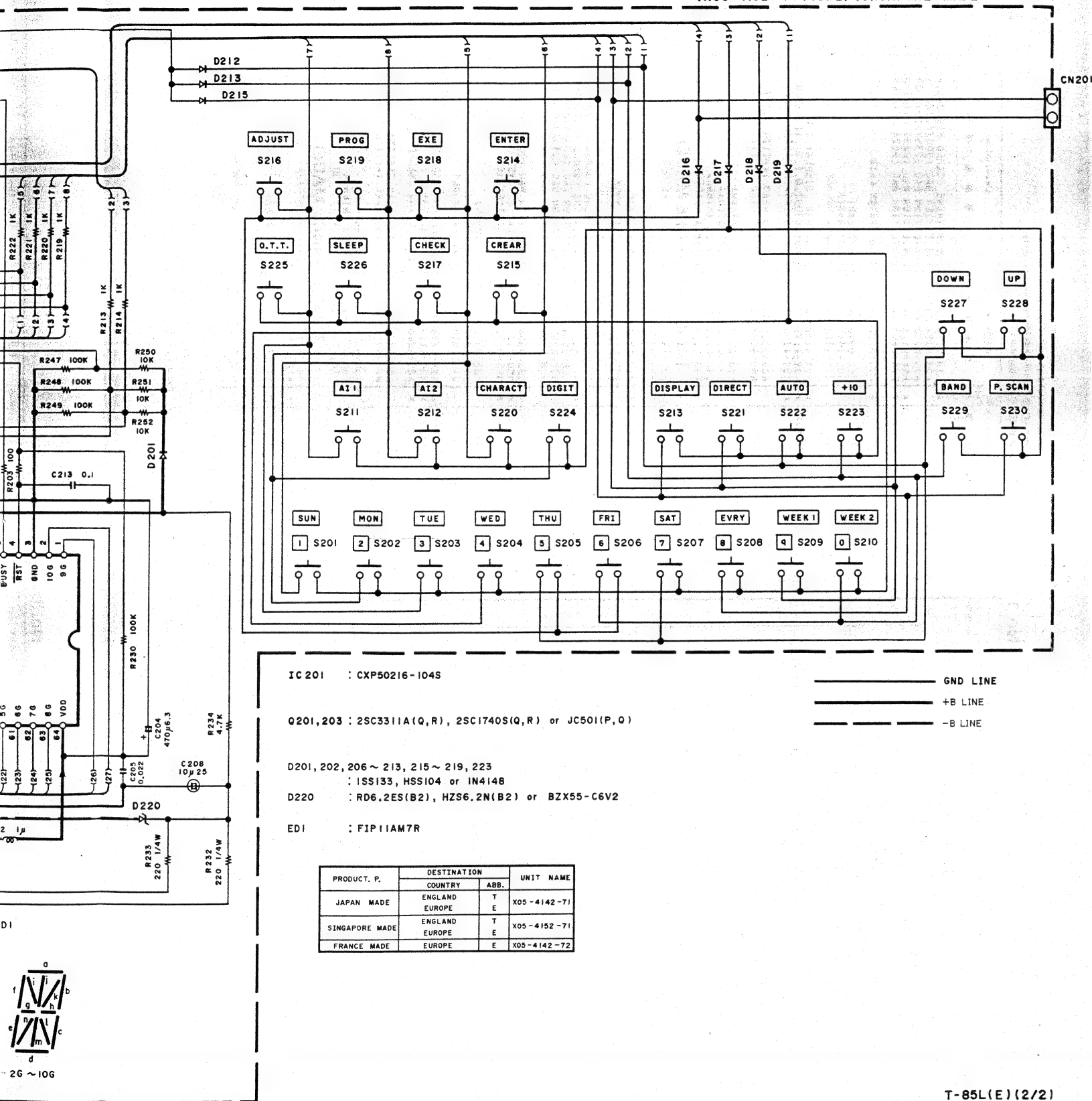
100



TO (X05)-(A/2) -WH1
TO (X05)-(B/2) -WH2



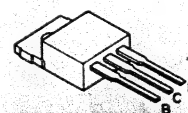
(X05-4142-XX)(B/2) JAPAN MADE, FRANCE MADE
(X05-4152-71)(B/2) SINGAPORE MADE



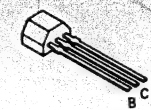
T-85L(E) (2/2)



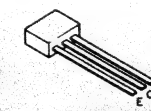
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JC501
2SC1845
2SC1923
2SC2003
2SD1302



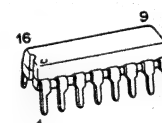
2SD1268



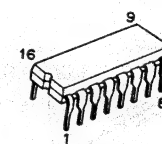
2SA933S
2SC1740S



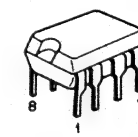
2SA1309A
2SC3311A



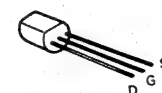
LM7001



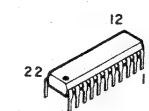
AN7470



BA10393



2SK163
2SK364



LA1265

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* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.3

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
604	3B	H10-5223-02	POLYSTYRENE FOAMED FIXTURE(R)	
605	3A	H25-0224-04	PROTECTION BAG (800X400X0.03)	
606	1A	H25-0232-04	PROTECTION BAG (235X350X0.03)	
607	2A	H50-0119-04	ITEM CARTON CASE	
608	2A	J02-0370-05	FOOT(REAR)	
609	2A	J02-1040-05	FOOT(FRONT)	
610	1A	J19-2B15-04	ANTENNA HOLDER	
611	2A	K29-4198-02	KN08(CHAR., DISPLAY, 1-0)	
612	2A	K29-4199-03	KN08(ADJUST. 0.T.T., AI TIMER 1)	
613	1A	K29-4200-03	KN08(TUNING/CHARACTER.BAND)	
A		N89-3008-45	BINDING HEAD TAPITE SCREW	
B		N89-3008-46	BINDING HEAD TAPITE SCREW	
610	1A	T90-0153-05	LOOP ANTENNA	
612	1A	T90-0176-05	T TYPE ANTENNA	
613	1A	T90-0177-05	ANTENNA ADAPTOR	
T-85 TUNER UNIT (X05-4140-20)				
C1		CK45FF1H103Z	CERAMIC	
C5		CE04KW1C470M	ELECTRO	
C6		C91-0769-05	CERAMIC	
C7		CK45FF1H103Z	CERAMIC	
C8		CE04KW1HR47M	ELECTRO	
C9		CC45FSL1H101J	CERAMIC	
C10		CE04KW1H2R2M	ELECTRO	
C11		CE04KW1H3R3M	ELECTRO	
C12		CK45FF1H103Z	CERAMIC	
C13		CQ92FM1H153J	MYLAR	
C14	15	CK45FF1H223Z	CERAMIC	
C16		CE04KW1V4R7M	ELECTRO	
C17		CK45FF1H223Z	CERAMIC	
C18		CE04KW1V100M	ELECTRO	
C19		CK45FF1H223Z	CERAMIC	
C20		CE04KW1V100M	ELECTRO	
C21		CE04KW1C101M	ELECTRO	
C22		CK45FF1H471K	CERAMIC	
C23		C92FV1H471J	W	
C24		CC93FCH1H471J	CERAMIC	
C25	26	CC45FSL1H151J	CERAMIC	
C27	28	CQ92FM1H233J	MYLAR	
C29	30	CE04KW1H010M	ELECTRO	
C31		CK45FF1H103Z	CERAMIC	
C32		CE04KW1HR47M	ELECTRO	
C33		CE04KW1H3R3M	ELECTRO	
C34		CE04KW1H2R2M	ELECTRO	
C41	42	CC45FCH1H220J	CERAMIC	
C43	45	CK45FF1H471K	CERAMIC	
C46		CK45FF1H103Z	CERAMIC	
C47		C91-0769-05	CERAMIC	
C48		C92FV1H273J	MF	
C49		CE04KW1H010M	ELECTRO	
C50		CE04KW1C470M	ELECTRO	
C51		CE04KW1H010M	ELECTRO	
C52		CE04KW1A470M	ELECTRO	
C56		CC45FSL1H220J	CERAMIC	

L:Scandinavia

Y:PX(Far East, Hawaii)

Y:AF(Europe)

K:USA

T:England

X:Australia

M:Other Areas

A indicates safety critical components

* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

No.4

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Re- marks 備考
C106		CE04KW1C470M	ELECTRO	
C107		CK45FF1H223Z	CERAMIC	
C135	136	CQ92FM1H752J	MYLAR	
C137		C91-0769-05	CERAMIC	
C201	202	CC45FCH1H220J	CERAMIC	
C203		CE04KW1H2R2M	ELECTRO	
C204		CE04KW0J471M	ELECTRO	
C205		C91-0085-05	CERAMIC	
C207		C90-1827-05	BACKUP	
C208		C90-1332-05	NP-ELEC	
C213		C92FV1H104J	MF	
C235		C91-0085-05	CERAMIC	
C301		CE04KW1H010M	ELECTRO	
C302		CE04KW1A470M	ELECTRO	
C303		CE04DW1C471M	ELECTRO	
C304		CE04KW1E221M	ELECTRO	
C309		CE04KW1H010M	ELECTRO	
C310		CE04KW1H221M	ELECTRO	
C311		CE04KW1H010M	ELECTRO	
C312		CE04KW1V222M	ELECTRO	
C314		CE04KW1H331M	ELECTRO	
C317		CK45FF1H103Z	CERAMIC	
C318	319	CC45FSL1H221J	CERAMIC	
C320		CE04KW1V100M	ELECTRO	
C321		CE04KW1V220M	ELECTRO	
C323		CE04KW1A471M	ELECTRO	
C324		CK45FF1H103Z	CERAMIC	
C325	326	C90-1839-05	NP-ELEC	
614	2B	E30-2667-05	CARD WITH CONNECTOR(WH3)	
71	3B	E20-0476-05	LOCK TERMINAL BOARD(ANTENNA)	
72	2B	E13-0235-05	PHONE JACK (3P)(OUTPUT)	
73	2B	E08-0312-05	RECTANGULAR RECEPTACLE(S.CONT)	
CF1	2	L72-0531-05	CERAMIC FILTER	
CF3		L72-0096-05	CERAMIC FILTER	
L1		L30-0488-05	AM IPT	
L2		L30-0439-25	FM IPT	
L8		L40-1091-17	SHALL FIXED INDUCTOR(1.00H)	
L104		L39-0189-05	COMBINATION COIL	
L106		L40-1091-17	SHALL FIXED INDUCTOR(1.00H)	
L201	202	L40-1091-17	SHALL FIXED INDUCTOR(1.00H)	
X1		L77-1122-05	CRYSTAL RESONATOR(7.2MHz)	
X201		L77-1176-05	CRYSTAL RESONATOR(4.194304MHz)	
CP201		R90-0487-05	MULTI-COMP	
CP202		R90-0604-05	MULTI-COMP	
R53		RS140B30221J	FL-PROOF RS	
R306		RS14KB3A221J	FL-PROOF RS	
R307	308	RS140B30151J	FL-PROOF RS	
R322		RS140B30488J	FL-PROOF RS	
R323		RS140B3A151J	FL-PROOF RS	
R324		RS140B3A222J	FL-PROOF RS	
R329		RS140B30102J	FL-PROOF RS	
R330	335	RS140B30121J	FL-PROOF RS	
VR1		R12-3687-05	TRIMMING POT. 33K (FM T-LEVEL)	
VR2	3	R12-1619-05	TRIMMING POT. 4.7K (VCO, AM T-L)	

L:Scandinavia

Y:PX(Far East, Hawaii)

Y:AF(Europe)

K:USA

T:England

X:Australia

M:Other Areas

A indicates safety critical components

T-85/85L

PARTS LIST

T-85/85L

PARTS LIST

No.6

X New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	Part No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向
Q3		2SC1740S(Q,R)	TRANSISTOR	
Q3		2SC3311A(Q,R)	TRANSISTOR	
Q102		2SA1309A(Q,R)	TRANSISTOR	
Q102		2SA933S(Q,R)	TRANSISTOR	
Q104		2SA1309A(Q,R)	TRANSISTOR	
Q104		2SA933S(Q,R)	TRANSISTOR	
Q107, 108		2SC1740S(Q,R)	TRANSISTOR	
Q107, 108		2SC3311A(Q,R)	TRANSISTOR	
Q201		2SC1740S(Q,R)	TRANSISTOR	
Q201		2SC3311A(Q,R)	TRANSISTOR	
Q202		2SA1309A(Q,R)	TRANSISTOR	
Q202		2SA933S(Q,R)	TRANSISTOR	
Q203		2SC1740S(Q,R)	TRANSISTOR	
Q203		2SC3311A(Q,R)	TRANSISTOR	
Q301, 302		2SC1302(S,T)	TRANSISTOR	
Q303		2SA1309A(Q,R)	TRANSISTOR	
Q303		2SA933S(Q,R)	TRANSISTOR	
Q304		2SC2003(L,K)	TRANSISTOR	
Q305		2SD1266(Q,P)	TRANSISTOR	
Q307		2SA1309A(Q,R)	TRANSISTOR	
Q307		2SA933S(Q,R)	TRANSISTOR	
Q308		2SC1740S(Q,R)	TRANSISTOR	
Q308		2SC3311A(Q,R)	TRANSISTOR	
DT1	38		FM FRONT-END ASSY	
T-85L TUNER UNIT (X05-4142-71)				
C1 -4		CK45FF1H103Z	CERAMIC	0.010UF Z
C5		CE04KV1C470H	ELECTRO	470UF 16WV
C6		C910769-05	CERAMIC	0.01UF K
C7		CK45FF1H103Z	CERAMIC	0.010UF Z
C8		CE04KV1HR47H	ELECTRO	0.470F 50WV
C9		CC45FSL1H101J	CERAMIC	100PF J
C10		CE04KV1H2R2N	ELECTRO	2.2UF 50WV
C11		CE04KV1H3R3M	ELECTRO	3.3UF 50WV
C12		CK45FF1H103Z	CERAMIC	0.010UF Z
C13		CQ92FM1H153J	MYLAR	0.015UF J
C14, 15		CK45FF1H223Z	CERAMIC	0.022UF Z
C16		CE04KV1V4R7M	ELECTRO	4.7UF 35WV
C17		CK45FF1H223Z	CERAMIC	0.022UF Z
C18		CE04KV1V100M	ELECTRO	10UF 35WV
C19		CK45FF1H223Z	CERAMIC	0.022UF Z
C20		CE04KV1V100M	ELECTRO	10UF 35WV
C21		CE04KV1C101M	ELECTRO	100UF 16WV
C22		CK45FB1H471K	CERAMIC	470PF K
C23		CF92FV1H473J	MYLAR	0.047UF J
C24		CC95FCH1H471J	CERAMIC	470PF J
C25, 26		CK45FB1H102K	CERAMIC	100PF K
C27, 28		CQ92FM1H4723	MYLAR	4700PF J
C29, 30		CE04KV1H2R2N	ELECTRO	2.2UF 50WV
C31		CK45FF1H103Z	CERAMIC	0.010UF Z
C32		CE04KV1HR47H	ELECTRO	0.47UF 50WV
C33		CE04KV1H3R3M	ELECTRO	3.3UF 50WV
C34		CE04KV1H2R2N	ELECTRO	2.2UF 50WV
C35		CK45FB1H471K	CERAMIC	470PF K
C36		CQ92FM1H152J	MYLAR	1500PF J

LS:Scandinavia K:USA P:Canada
Y:FX(Far East, Hawaii) T:England E:Europe
X:Australia M:Other Areas

△ indicates safety critical components

No.5

X New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位置	Part No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向
S101	2B	S31-2094-05	SLIDE SWITCH (05-ER, CH. SPACE)	M
S201-230	2A, 2B	S40-1064-05	PUSH SWITCH	
D2		HSS104	DIODE	
D2		1SS133	DIODE	
D3		HZ55.1N(B2)	ZENER DIODE	
D3		R05.1ES(B2)	ZENER DIODE	
D4		HSS104	DIODE	
D4		1SS133	DIODE	
D111, 112		HSS104	DIODE	
D111, 112		1SS133	DIODE	
D201, 202		HSS104	DIODE	
D201, 202		1SS133	DIODE	
D203		HZ53.9N(B2)	ZENER DIODE	
D203		R03.9ES(B2)	ZENER DIODE	
D204		HSS104	DIODE	
D204		1SS133	DIODE	
D206-212		HSS104	DIODE	
D206-212		1SS133	DIODE	
D213		HSS104	DIODE	
D213		1SS133	DIODE	
D214		HSS104	DIODE	
D214		1SS133	DIODE	
D216-219		HSS104	DIODE	
D216-219		1SS133	DIODE	
D220		HZ56.2N(B2)	ZENER DIODE	
D220		R06.2ES(B2)	ZENER DIODE	
D221		HSS104	DIODE	
D221		1SS133	DIODE	
D222		HSS104	DIODE	
D222		1SS133	DIODE	
D223		HSS104	DIODE	
D223		1SS133	DIODE	
D301		HZ53.3N(B2)	ZENER DIODE	
D301		R03.3ES(B2)	ZENER DIODE	
D302		HZ56.2N(B2)	ZENER DIODE	
D302		R06.2ES(B2)	ZENER DIODE	
D303		HZ515N(B)	ZENER DIODE	
D303		RD15ES(B)	ZENER DIODE	
D304		S5468B	DIODE	
D304		1SR139-100	DIODE	
D307-312		S5468B	DIODE	
D307-312		1SR139-100	DIODE	
D313-316		HSS104	DIODE	
D313-316		1SS133	DIODE	
D318, 319		S568B	DIODE	
D318, 319		1SR139-100	DIODE	
ED1	1A	FP11AN7R	FLUORESCENT INDICATOR TUBE	
IC1		LA1265	IC(FM/AM TUNER)	
IC2		AN7470	IC(FM MPX)	
IC3		LM7001	IC(PLL FREQUENCY SYNTHESIZER)	
IC201		CXP50216-104S	IC(MICROPROCESSOR)	
IC202		BA10393	IC(DUAL COMPALATOR)	
Q1		2SC1923(R,0)	TRANSISTOR	
Q2		2SC1045(F,E)	TRANSISTOR	

LS:Scandinavia K:USA P:Canada
Y:FX(Far East, Hawaii) T:England E:Europe
X:Australia M:Other Areas

△ indicates safety critical components

T-85/85L

PARTS LIST

No.8

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名/規格	Desti- nation 仕向	Re- marks 備考
L1		L30-0488-05	AM IFT		
L2		L30-0439-25	(DISCRIMINATOR)		
L3		L40-1021-14	SMALL FIXED INDUCTOR(1.0mH, K)		
L4		L40-5625-29	SMALL FIXED INDUCTOR(5.6mH, J)		
L5		L40-6825-29	SMALL FIXED INDUCTOR(6.8mH, J)		
L6	7	L79-0790-05	LC FILTER		
L8		L40-1091-17	SMALL FIXED INDUCTOR(1.0uH)		
L104		L39-0195-05	COMBINATION COIL		
L105		L39-0192-05	COMBINATION COIL		
L106		L40-1091-17	SMALL FIXED INDUCTOR(1.0uH)		
L201, 202		L40-1091-17	SMALL FIXED INDUCTOR(1.0uH)		
X1		L77-1122-05	CRYSTAL RESONATOR(7.2MHz)		
X201		L77-1176-05	CRYSTAL RESONATOR(4.194304MHz)		
C201		R90-0487-05	MULTI-COMP 47KX4 J 1/6W		
C202		R90-0804-05	MULTI-COMP 47KX6 J 1/4W		
R32		RS140830221J	FL-PR00F RS 220 J 2W		
R306		RS14KB3A221J	FL-PR00F RS 220 J 1W		
R307, 308		RS140830151J	FL-PR00F RS 150 J 2W		
R322		RS1408306R8J	FL-PR00F RS 6.8 J 2W		
R323		RS14083A151J	FL-PR00F RS 150 J 1W		
R324		RS14083A222J	FL-PR00F RS 2.2K J 1W		
R329		RS140830102J	FL-PR00F RS 1.0K J 2W		
R330-335		RS140830121J	FL-PR00F RS 120 J 2W		
VR1		R12-3130-05	TRIMMING POT. 33K (FM T-LEVEL)	F	
VR2		R12-3687-05	TRIMMING POT. 33K (FM T-LEVEL)	F	
VR2, 3		R12-1089-05	TRIMMING POT. 4.7K (VCO AM T-L)	F	
VR4		R12-1619-05	TRIMMING POT. 4.7K (VCO AM T-L)	F	
VR4		R12-5060-05	TRIMMING POT. 220K (SEPARATION)	F	
VR4		R12-5652-05	TRIMMING POT. 220K (SEPARATION)	F	
S201-230	2A, 2B	S40-1064-05	PUSH SWITCH		
D1, 2		H5S104	DIODE	F	
D1, 2		1N4148	DIODE	F	
D1, 2		1S5133	DIODE	F	
D3		BX55-CSV1	ZENER DIODE	F	
D3		HZ55.1N(B2)	ZENER DIODE	F	
D3		RD5.1ES(B2)	ZENER DIODE	F	
D4		H5S104	DIODE	F	
D4		1N4148	DIODE	F	
D4		1S5133	DIODE	F	
D101		H5S104	DIODE	F	
D101		1N4148	DIODE	F	
D101		1S5133	DIODE	F	
D103		H5S104	DIODE	F	
D103		1N4148	DIODE	F	
D103		1S5133	DIODE	F	
D109-116		H5S104	DIODE	F	
D109-116		1N4148	DIODE	F	
D109-116		1S5133	DIODE	F	
D201, 202		H5S104	DIODE	F	
D201, 202		1N4148	DIODE	F	
D201, 202		1S5133	DIODE	F	
D203		BX55-CSV9	ZENER DIODE	F	
D203		HZ55.9N(B2)	ZENER DIODE	F	

No.7

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名/規格	Desti- nation 仕向	Re- marks 備考
C37		CQ92FM1H132J	MYLAR 1300PF J		
C38		CC45FSL1H121J	CERAMIC 120PF J		
C39		CC45FSL1H271J	CERAMIC 270PF J		
C40		CC45FSL1H221J	CERAMIC 220PF J		
C41, 42		CC45FCH1H220J	CERAMIC 22PF J		
C43-45		CK45FB1H471K	CERAMIC 470PF K		
C46		CK45FF1H103Z	CERAMIC 100PF Z		
C47		C91-0769-05	CERAMIC 0.01uF K		
C48		CF92FV1H273J	MF 0.027uF J		
C49		CE04KW1H010M	ELECTRO 1.0uF 50V		
C50		CE04KW1C470M	ELECTRO 47uF 16V		
C51		CE04KW1H010M	ELECTRO 1.0uF 50V		
C52		CE04KW1A470M	ELECTRO 47uF 10V		
C53, 54		CE04KW1C220M	ELECTRO 22uF 16V		
C56		CC45FSL1H220J	CERAMIC 22PF J		
C106		CE04KW1C470M	ELECTRO 47uF 16V		
C107, 108		CK45FF1H223Z	CERAMIC 0.022uF Z		
C109, 110		C91-0085-05	CERAMIC 0.022uF N		
C111-113		CK45FF1H223Z	CERAMIC 0.022uF Z		
C114		C91-0085-05	CERAMIC 0.022uF N		
C137		C91-0769-05	CERAMIC 0.01uF K		
C170		C91-0745-05	CERAMIC 100PF K		
C171		C91-0737-05	CERAMIC 47PF J		
C201, 202		CC45FCH1H220J	CERAMIC 22PF J		
C203		CE04KW1H2R2M	ELECTRO 2.2uF 50V		
C204		CE04KW0J471M	ELECTRO 470uF 6.3V		
C205		C91-0085-05	CERAMIC 0.022uF N		
C207		C90-1827-05	BACKUP 0.047F 5.5V		
C208		C90-1332-05	NP-ELEC 10uF 25V		
C213		CF92FV1H04J	MF 0.10uF J		
C235		C91-0085-05	CERAMIC 0.022uF N		
C301		CE04KW1H010M	ELECTRO 1.0uF 50V		
C302		CE04KW1A470M	ELECTRO 47uF 10V		
C303		CE04KW1C471M	ELECTRO 470uF 16V		
C304		CE04KW1E221M	ELECTRO 220uF 25V		
C309		CE04KW1H010M	ELECTRO 100uF 50V		
C310		CE04KW1H221M	ELECTRO 220uF 50V		
C311		CE04KW1H010M	ELECTRO 100uF 50V		
C312		CE04KW1V222M	ELECTRO 2200uF 35V		
C314		CE04KW1H331M	ELECTRO 330uF 50V		
C315, 316		C91-0749-05	CERAMIC 220PF K		
C317		CK45FF1H103Z	CERAMIC 0.010uF Z		
C318, 319		CC45FSL1H221J	CERAMIC 220PF J		
C320		CE04KW1V100M	ELECTRO 100uF 35V		
C321		CE04KW1V220M	ELECTRO 22uF 35V		
C323		CE04KW1A471M	ELECTRO 470uF 10V		
C324		CK45FF1H103Z	CERAMIC 0.010uF Z		
C325, 326		C90-1839-05	NP-ELEC 120uF 42V		
614	2B	E30-2667-05	CORD WITH CONNECTOR(VH3)		
J1	3B	E20-0321-05	LOCK TERMINAL BOARD(ANTENNA)		
J2	2B	E13-0235-05	PHONE JACK (SP) (OUTPUT)		
J3	2B	E08-0312-05	RECTANGULAR RECEPTACLE(S. CONT)		
CF1, 2		L72-0536-05	CERAMIC FILTER		
CF3		L72-0096-05	CERAMIC FILTER		

F:FRANCE MADE

L:Scandinavia
Y:PX(Far East, Hawaii)
Y:AFES(Europe)

K:USA
T:England
X:Australia

P:Canada
E:Europe
M:Other Areas

△ indicates safety critical components.

* New Parts

Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

* New Parts

Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

* New Parts
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Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

No.9

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 内備考
D203		R23.95S(B2)	ZENER DIODE		
D204		HSS104	DIODE		F
D204		1N4148	DIODE		
D204		1SS133	DIODE		
D206-213		HSS104	DIODE		
D206-213		1N4148	DIODE		
D206-213		1SS133	DIODE		
D215-219		HSS104	DIODE		
D215-219		1N4148	DIODE		
D215-219		1SS133	DIODE		
D220		BZX55-C6V2	DIODE		
D220		HZ56-2N(B2)	ZENER DIODE		
D220		R06.25S(B2)	ZENER DIODE		
D221		HSS104	DIODE		F
D221		1N4148	DIODE		
D221		1SS133	DIODE		
D223		HSS104	DIODE		
D223		1N4148	DIODE		
D223		1SS133	DIODE		
D301		BZX55-C3V3	ZENER DIODE		F
D301		HZ53.3N(B2)	ZENER DIODE		
D301		R03.3ES(B2)	ZENER DIODE		
D302		BZX55-C6V2	DIODE		
D302		HZ56.2N(B2)	ZENER DIODE		
D302		R06.2ES(B2)	ZENER DIODE		
D303		BZX55-C15	DIODE		F
D303		HZ515N(B)	ZENER DIODE		
D303		RD15ES(B)	ZENER DIODE		
D304		SS6888	DIODE		
D304		1N4004	DIODE		
D304		1SR139-100	DIODE		
D307-312		SS6888	DIODE		
D307-312		1N4004	DIODE		
D307-312		1SR139-100	DIODE		
D313-316		HSS104	DIODE		
D313-316		1N4148	DIODE		
D313-316		1SS133	DIODE		
D318-319		SS6888	DIODE		
D318-319		1N4004	DIODE		
D318-319		1SR139-100	DIODE		
ED1	1A	FLUORESCENT INDICATOR TUBE			
IC2		IC(PW/M TUNER)			
IC2		LA1265	IC(PW/M TUNER)		
IC2		AN7470	IC(PW/M TUNER)		
IC201		LA7001	IC(PW/M TUNER)		
IC201		CXP50216-104S	IC(PW/M TUNER)		
IC202		BA10393	IC(DUAL COMPALATOR)		
Q1		2SC1923(R.0)	TRANSISTOR		
Q2		2SC1845(F.E)	TRANSISTOR		
Q3		JC501(P.Q)	TRANSISTOR		
Q3		2SC1740S(Q,R)	TRANSISTOR		
Q3		2SC3311A(Q,R)	TRANSISTOR		
Q5		2SK163(L.H)	FET		
Q5		2SK364(GR.BL)	FET		
Q102-104		JA101(P.Q)	TRANSISTOR		
Q102-104		2SA1309A(Q,R)	TRANSISTOR		

L:Scandinavia
Y:PX(Far East, Hawaii)
Y:AFES(Europe)
KUSA
T:England
X:Australia
P:Canada
E:Europe
M:Other Areas
F:FRANCE MADE
A indicates safety critical components.

* New Parts
Parts without Parts No. are not supplied.
Les articles non mentionnés dans le Parts No. ne sont pas fournis.
Teile ohne Parts No. werden nicht geliefert.

No.10

Ref. No. 参照番号	Address 位置	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕	Re- marks 内備考
Q102-104		2SA933S(Q,R)	TRANSISTOR		
Q105,106		JC501(P.Q)	TRANSISTOR		F
Q105,106		2SC1740S(Q,R)	TRANSISTOR		
Q105,106		2SC3311A(Q,R)	TRANSISTOR		
Q201		JC501(P.Q)	TRANSISTOR		F
Q201		2SC1740S(Q,R)	TRANSISTOR		
Q201		2SC3311A(Q,R)	TRANSISTOR		
Q203		JC501(P.Q)	TRANSISTOR		
Q203		2SC1740S(Q,R)	TRANSISTOR		
Q203		2SC3311A(Q,R)	TRANSISTOR		
Q301,302		2SD1302(S,T)	TRANSISTOR		F
Q303		JA101(P.Q)	TRANSISTOR		
Q303		2SA1309A(Q,R)	TRANSISTOR		
Q303		2SA933S(Q,R)	TRANSISTOR		
Q304		2SC2003(L,K)	TRANSISTOR		
Q305		2SD1266(Q,P)	TRANSISTOR		F
Q307		JA101(P.Q)	TRANSISTOR		
Q307		2SA1309A(Q,R)	TRANSISTOR		
Q307		2SA933S(Q,R)	TRANSISTOR		
Q308		JC501(P.Q)	TRANSISTOR		F
Q308		2SC1740S(Q,R)	TRANSISTOR		
Q308		2SC3311A(Q,R)	TRANSISTOR		
DT1	3B	W02-1041-05	FM FRONT-END ASSY		

L:Scandinavia
Y:PX(Far East, Hawaii)
Y:AFES(Europe)
KUSA
T:England
X:Australia
P:Canada
E:Europe
M:Other Areas
F:FRANCE MADE
A indicates safety critical components.

PARTS LIST

T-85/85L

T-85/85L

SPECIFICATIONS

T-85

FM tuner section

Tuning frequency range87.5 MHz~108 MHz

Usable sensitivity (IHF at 75 Ω).....0.95 μ V/10.8 dBf

Total harmonic distortion (at 1 kHz, 65 dBf input)

MONO0.4%

STEREO0.5%

Signal to noise ratio (at 1 kHz, 65 dBf input)

MONO78 dB

STEREO72 dB

Stereo separation (at 1 kHz).....40 dB

Alternate channel selectivity

(± 400 kHz).....50 dB

Frequency response

(30 Hz~15 kHz).....+0.5 dB, -3.5 dB

Output level/Impedance

(at 75 kHz dev.).....0.6 V/3.3 k Ω

AM tuner section

Tuning frequency range

531 kHz~1,602 kHz.....9 kHz step

530 kHz~1,610 kHz.....10 kHz step

Usable sensitivity14 μ V/500 μ V/m

Signal to noise ratio

(at 30% mod. 1 mV Input).....48 dB

General

DimensionW: 360 mm

H: 89 mm

D: 353 mm

Weight.....3.0 kg

T-85L

FM tuner section

Tuning frequency range87.5 MHz~108 MHz

Usable sensitivity (DIN at 75 Ω)

MONO0.6 μ V

STEREO22 μ V

Total harmonic distortion (DIN at 1 kHz, 65.2 dBf input)

MONO0.2%

STEREO0.8%

Signal to noise ratio (DIN weighted at 1 kHz, 65.2 dBf input)

MONO68 dB

STEREO63 dB

Stereo separation (DIN at 1 kHz)....42 dB

Alternate channel selectivity

(DIN ± 300 kHz).....64 dB

Frequency response

(30 Hz~15 kHz).....+0.5 dB, -3.5 dB

Output level/Impedance

(at 75 kHz dev.).....0.6 V/3.3 k Ω

MW tuner section

Tuning frequency range531 kHz~1,602 kHz

Usable sensitivity13 μ V/500 μ V/m

Signal to noise ratio

(at 30% mod. 1 mV input).....49 dB

LW tuner section

Tuning frequency range153 kHz~281 kHz

Usable sensitivity20 μ V

Signal to noise ratio

(at 30% mod. 1 mV input).....47 dB

General

DimensionW: 360 mm

H: 89 mm

D: 353 mm

Weight.....3.0 kg

KENWOOD follows a policy of continuous advancements in development. For this reason specifications may be changed without notice.

KENWOOD poursuit une politique de progrès constants en ce qui concerne le développement. Pour cette raison, les spécifications sont sujettes à modifications sans préavis.

KENWOOD strebt ständige Verbesserungen in der Entwicklung an. Daher bleiben Änderungen der technischen Daten jederzeit vorbehalten.

Note:

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the Europe (E) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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